

MSC Guidelines for Review of Chemical Tankship General Arrangements

Procedure Number: T1-25

Revision Date: 01/18/00

References

- a. 46 CFR Subchapter O
- b. 46 CFR Subchapter D
- c. 33 CFR Part 157, Rules for the Protection of the Marine Environment Relating to Tank Vessels Carrying Oil in Bulk
- d. International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, 1994 (IBC)
- e. International Convention for the Safety of Life at Sea, 1974, and its Protocol of 1978 (SOLAS), as amended
- f. International Convention for the Prevention of Pollution from Ships, 1973, as modified by its Protocol of 1978 (MARPOL 73/78), as amended
- g. Marine Safety Manual, Volume II, Chapter 27: Carriage of Bulk Liquid Chemicals

Disclaimer

These guidelines were developed by the Marine Safety Center staff as an aid in the preparation and review of vessel plans and submissions. They were developed to supplement existing guidance. They are not intended to substitute or replace laws, regulations, or other official Coast Guard policy documents. The responsibility to demonstrate compliance with all applicable laws and regulations still rests with the plan submitter. The Coast Guard and the U. S. Department of Transportation expressly disclaim liability resulting from the use of this document.

Contact Information

If you have any questions or comments concerning this document, please contact the Marine Safety Center by e-mail or phone. Please refer to the Procedure Number: **T1-25**

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General Review Guidance

- ❑ If the vessel is new and not a sister vessel, has the Application for Inspection been submitted? In general, no plan review will occur until receipt of a copy of the Application.
- ❑ Is it clearly stated what is desired from the MSC? Are all plans requiring Coast Guard review and/or approval submitted in triplicate? Are there any special or unusual requests involved?

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- ❑ Does the vessel meet the criteria in 33 CFR 157.01? Does the vessel meet the definitions of oil tanker in 33 CFR 157.03 or MARPOL Annex I, Chapter I? If yes, then the OPA 90 regulations contained in 33 CFR and the MARPOL requirements of Annex I will apply. Follow the guidance provided in the MSC Guidelines for Review of Tankship General Arrangements for these reviews.
- ❑ If the vessel is defined as a chemical tanker in MARPOL Annex II, Regulation 1, or SOLAS Chapter II-2, Regulation 3.30, then the following review guidance will apply:
- ❑ Determine whether the vessel is oceangoing or non-oceangoing (Use 46 CFR 153).
- ❑ Determine what hull type is required and desired for the vessel (Type I, II, or III) as specified in Section 2.1.2 of the IBC Code and 46 CFR 153.230-153.232.
- ❑ Are all spaces identified and designated on the plan?
- ❑ Double Bottom
 - ❑ A double bottom shall be fitted in accordance with 46 CFR 153.230/231/232 and/or Section 2.6.1 of the IBC Code.
- ❑ Double Side
 - ❑ A double side shall be fitted in accordance with 46 CFR 153.230/231/232 and/or Section 2.6.1 of the IBC Code.
- ❑ Means of Escape
 - ❑ Two means of escape must be provided from accommodations, spaces normally manned, and machinery spaces, as required by 46 CFR 32.02-1 and Chapter II-2, Regulation 45 of reference (e).
- ❑ Location of Spaces
 - ❑ Accommodation spaces, main cargo control stations, control stations and service spaces shall be positioned aft of all cargo tanks, slop tanks, and spaces which isolate cargo or slop tanks from machinery spaces, in accordance with 46 CFR 153.234, Chapter II-2, Regulation 56-2 of reference (e) and Chapter 3, Regulation 3.1 and 3.2.1 of reference (d).
 - ❑ Machinery spaces shall be positioned aft of cargo and slop tanks, in accordance with Chapter II-2, Regulation 56-1 of reference (e).

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- ❑ Access Doors, Air Inlets, and Openings
 - ❑ Any form of opening into accommodation spaces, service spaces, control stations and machinery spaces shall not face the cargo area, Chapter II-2, Regulation 56-8.1 of reference (e), except as provided in Section 8.2, 46 CFR 153.201, and Chapter 3, Regulation 3.2.2 and 3.2.3 of reference (d).
- ❑ Sleeping Accommodations
 - ❑ No sleeping space may berth more than 4 persons (46 CFR 32.40-20(b)).
 - ❑ Each licensed officer shall be provided with a separate stateroom, where practicable (46 CFR 32.40-20(a)).
 - ❑ Sizing, spacing and lockers must be provided (46 CFR 32.40-20(c)-(e)).
- ❑ Wash spaces; toilet spaces; and shower spaces
 - ❑ Each unit must have at least 1 toilet, 1 washbasin, and 1 shower or bathtub for every 8 persons who occupy sleeping spaces that do not have private or semi-private facilities attached. All facilities shall be constructed in accordance with 46 CFR 32.40-25.
- ❑ Messrooms
 - ❑ Messrooms shall be constructed in accordance with 46 CFR 32.40-30.
- ❑ Hospital Spaces
 - ❑ Each unit carrying twelve or more persons on a voyage of more than 3 days requires a hospital space or a designated treatment or isolation room, in accordance with 46 CFR 32.40-35.
- ❑ Other spaces
 - ❑ Laundry, recreation, and open deck spaces shall be provided in accordance with 46 CFR 32.40-40.
- ❑ Guardrails and Bulwarks
 - ❑ Guardrails or bulwarks shall be constructed in accordance with 46 CFR 32.01-10.
 - ❑ The height of rails and bulwarks shall be at least 39.5 inches.
- ❑ Containment of deck spills
 - ❑ Deck coamings and enclosed areas shall be constructed in accordance with 33 CFR 155.310 and/or Chapter II-2, Regulation 56-6 of reference (e).

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- ❑ Cargo pump-rooms
 - ❑ Verify that the cargo pump rooms are in compliance with Chapter 3, Regulation 3.3 of reference (d).
- ❑ Access to spaces in the cargo area
 - ❑ Verify that accesses to spaces in the cargo area are in compliance with Chapter 3, Regulation 3.4 of reference (d).
- ❑ Safe access to tanker bows. SOLAS Chapter II-1, Part A-1, Regulation 3-3. Tankers constructed after 1 July 1998 shall comply with this requirement upon vessel construction. For vessels constructed before this date, safe access to tanker bows shall be provided at the first scheduled dry-docking after 1 July 1998, but not later than 1 July 2001.
- ❑ Emergency towing arrangements on tankers, SOLAS Chapter II-1, Part A-1, Regulation 3-4. Tankers constructed after 1 January 1996 and over 20,000 tonnes deadweight shall comply with this requirement upon vessel construction. For vessels constructed before this date, such an arrangement shall be fitted at the first scheduled dry-docking after 1 January 1996, but not later than 1 January 1999.